



## SEQUENCE LISTING

- <110> Jongsma, Maarten Anthonie  
Strukelj, Borut  
Lenarcic, Brigita  
Gruden, Kristina  
Turk, Vito  
Bosch, Hendrik J.  
Stiekema, Willem Johannes
- <120> A Method for Plant Protection Against Insects or Nematodes
- <130> 250308-1020
- <140> 09/445,480  
<141> 2000-07-07
- <150> PCT/NL98/00352  
<151> 1998-06-18
- <160> 17
- <170> PatentIn version 3.2
- <210> 1  
<211> 888  
<212> DNA  
<213> Actinia equina
- <300>  
<301> Gruden, Kristina; Strukelj, Borut; Popovic, Tatjana; Lenarci  
C,  
Brigita; Bevec, Tadeja; Brzin, Joze; Kregar, Igor;  
Herzog-Velikonja, Jana; Stiekema, Willem J; Bosch, Dirk  
<302> The Cysteine Protease Activity of Colorado Potato Beetle  
(Leptinotarsa decemlineata) Guts, Which is Insensitive to Po  
tato  
Protease Inhibitors, is Inhibited by Thyroglobulin Type-1  
<303> Insect Biochem. Mol. Biol  
<304> 28  
<306> 549-560  
<307> 1998
- <400> 1  
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120

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gagagttcga agaaaaacaa tgctggggat cgactgggta ctgttggtgt gtggatgaag  
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720

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780

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&lt;210&gt; 2

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Actinia equina

&lt;400&gt; 2

Met Ala Leu Ser Gln Asn Gln Ala Lys Phe Ser Lys Gly Phe Val Val  
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 Met Ile Trp Val Leu Phe Ile Ala Cys Ala Ile Thr Ser Thr Glu Ala  
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 Ser Leu Thr Lys Cys Gln Gln Leu Gln Ala Ser Ala Asn Ser Gly Leu  
 35 40 45  
 Ile Gly Thr Tyr Val Pro Gln Cys Lys Glu Thr Gly Glu Phe Glu Glu  
 50 55 60  
 Lys Gln Cys Trp Gly Ser Thr Gly Tyr Cys Trp Cys Val Asp Glu Asp  
 65 70 75 80  
 Gly Lys Glu Ile Leu Gly Thr Lys Ile Arg Gly Ser Pro Asp Cys Ser  
 85 90 95  
 Arg Arg Lys Ala Ala Leu Thr Leu Cys Gln Met Met Gln Ala Ile Ile  
 100 105 110  
 Val Asn Val Pro Gly Trp Cys Gly Pro Pro Ser Cys Lys Ala Asp Gly  
 115 120 125  
 Ser Phe Asp Glu Val Gln Cys Cys Ala Ser Asn Gly Glu Cys Tyr Cys  
 130 135 140  
 Val Asp Lys Lys Gly Lys Glu Leu Glu Gly Thr Arg Gln Gln Gly Arg  
 145 150 155 160  
 Pro Thr Cys Glu Arg His Leu Ser Glu Cys Glu Glu Ala Arg Ile Lys  
 165 170 175  
 Ala His Ser Asn Ser Leu Arg Val Glu Met Phe Val Pro Glu Cys Leu  
 180 185 190

Glu Asp Gly Ser Tyr Asn Pro Val Gln Cys Trp Pro Ser Thr Gly Tyr  
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Arg Phe Lys Arg Pro Thr Cys  
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caggcctcgg ctaacagtgg tctgataggt acttatgtac cacaatgcaa agaaactgga  
 180

gagtttgaag aaaagcaatg ctggggatcg actgggttact gttgggtgtgt ggatgaagat  
 240

ggaaaagaga ttctaggtac aaagatccgt ggatctccag actgcagtcg cagaaaagct  
 300

gccttaacac tttgccagat gatgcaagcc atcattgtga atgtccctgg ttgggtgtgga  
 360

cctccatcat gtaaagctga cggcagtttt gacgaggttc agtgctgcgc aagtaatgga  
 420

gaatgctact gtgtggataa gaaaggaaaa gaacttgaag gcacaagaca acagggaagg  
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ccaacctgcg aaagacacct aagcgaatgc gaggaggctc gtatcaaggc acattcaaac  
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600

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660

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Ser	Leu	Thr	Lys	Cys	Gln	Gln	Leu	Gln	Ala	Ser	Ala	Asn	Ser	Gly	Leu
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Ile	Gly	Thr	Tyr	Val	Pro	Gln	Cys	Lys	Glu	Thr	Gly	Glu	Phe	Glu	Glu
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Lys	Gln	Cys	Trp	Gly	Ser	Thr	Gly	Tyr	Cys	Trp	Cys	Val	Asp	Glu	Asp
65					70				75					80	

Gly	Lys	Glu	Ile	Leu	Gly	Thr	Lys	Ile	Arg	Gly	Ser	Pro	Asp	Cys	Ser
				85				90						95	

Arg	Arg	Lys	Ala	Ala	Leu	Thr	Leu	Cys	Gln	Met	Met	Gln	Ala	Ile	Ile
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Val Asn Val Pro Gly Trp Cys Gly Pro Pro Ser Cys Lys Ala Asp Gly  
 115 120 125

Ser Phe Asp Glu Val Gln Cys Cys Ala Ser Asn Gly Glu Cys Tyr Cys  
 130 135 140

Val Asp Lys Lys Gly Lys Glu Leu Glu Gly Thr Arg Gln Gln Gly Arg  
 145 150 155 160

Pro Thr Cys Glu Arg His Leu Ser Glu Cys Glu Glu Ala Arg Ile Lys  
 165 170 175

Ala His Ser Asn Ser Leu Arg Val Glu Met Phe Val Pro Glu Cys Leu  
 180 185 190

Glu Asp Gly Ser Tyr Asn Pro Val Gln Cys Trp Pro Ser Thr Gly Tyr  
 195 200 205

Cys Trp Cys Val Asp Glu Gly Gly Val Lys Val Pro Gly Ser Asp Val  
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Arg Phe Lys Arg Pro Thr Cys  
 225 230

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Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Gln Cys Xaa Xaa Xaa Xaa Xaa  
 20 25 30



Xaa Cys Thr Cys Val Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Cys  
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Pro Thr Glu Phe Xaa Arg Leu  
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<211> 24

<212> DNA

<213> artificial

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<223> primer

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